

GEO WORKING GROUP GEOGRAPHIC LOCATION (GEO) RECOMMENDATION

ANSI/NIST ITL Standards
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ANSI/NIST ITL MARCH 1, 2011 WORKING GROUP

- ◉ Reached agreement on need for the establishing the GEO element
- ◉ Agreed on the formal term:
 - Geographic sample acquisition location / GEO
- ◉ Draft only received 4 comments, mostly editorial, still welcome comments and concerns

7.7 GEOGRAPHIC SAMPLE ACQUISITION LOCATION / GEO

- ◎ This optional field (**xx.998**) is used in Record Types 10 and above. It specifies the location where the biometric sample was collected. There are alternate, optional formats for the geographic information contained in this field.

PROPOSED RECORD TYPES TO BE UPDATED WITH GEO

The following record types were updated with
xx.998

- Type 10 (Photo/SMT)
- Type 11 (New proposed Voice)
- Type 12 (New proposed Dental)
- Type 13 (Variable Resolution Latent Image)
- Type 14 (Variable Resolution Fingerprint image)
- Type 15 (Variable Resolution Palm image)
- Type 16 (User Defined record))
- Type 17 (IRIS Image)
- Type 18 (Proposed DNA)
- Type 19 (Proposed Variable Resolution Plantar image)
- Type 20/21 (Proposed Original Reference Image)
- ...
- Type 99 (CBEFF)

7.7 GEOGRAPHIC SAMPLE ACQUISITION LOCATION / GEO

- This optional field is composed of thirteen information items. This field shall be used to document the universal date, time and geographic location where the biometric record was captured. Geospatial is defined as pertaining to the geographic location and characteristics of natural or constructed features and boundaries on, above, or below the earth's surface; esp. referring to data that is geographic and spatial in nature.

7.7 GEOGRAPHIC SAMPLE ACQUISITION LOCATION / GEO

1> Coordinated universal time entry /UTE see Clause 7.15.2.

The next eight information items (information items 2 through 9) comprise the Geographic Coordinate Latitude/Longitude. They are optional. However, if LTD appears, then LGD shall also be present

- ◉ 2> **Latitude degree value / LTD.** This is a value that specifies the degree of latitude.
- ◉ 3> **Latitude minute value / LTM.** This is a value that specifies a minute of a degree.
- ◉ 4> **Latitude second value / LTS.** This is a value that specifies a second of a minute.
- ◉ 5> **Longitude degree value / LGD.** It is a value that specifies the degree of a longitude.
- ◉ 6> **Longitude minute value / LGM.** It is a value that specifies a minute of a degree.
- ◉ 7> **Longitude second value / LGS.** It is a value that specifies a second of a minute.
- ◉ 8> **Elevation / ELE.** It is expressed in meters. I
- ◉ 9> **Geodetic datum code / GDC32.** This information item is used to indicate which coordinate system was used..

MILITARY GRID REFERENCE SYSTEM (MGRS).

The tenth, eleventh and twelfth information items are treated as a group and are optional. These three information items together are a coordinate which represents a location with a Universal Transverse Mercator (UTM) coordinate and a unique military grid square. If any of these three information items is present, all shall be present.

- ◉ The tenth information item is the **Geographic coordinate universal transverse mercator zone / GCM**.
- ◉ The eleventh information item is the **Geographic coordinate universal transverse mercator easting / GCE**. It is a numeric value of 2 for 1 kilometer precision, 3 digits for 100 meter precision, 4 digits for 10 meter precisions and 5 digits 1 meter precision.
- ◉ The twelfth information item is the **Geographic coordinate universal transverse mercator northing / GCN**. It is a numeric value of 2 =1 kilometer precision, 3 digits for 100 meter precision, 4 digits for 10 meter precisions and 5 digits for 1 meter precision.
- ◉ The thirteenth information item is optional. It is the **Geographic reference text / GRT**. This information item is an alphanumeric entry of up to 150 characters. It is a free form text describing a street address or other physical location (such as 'Corner of Washington and Madison, Geneva, NY')

GEO WORKING COMMITTEE RECOMMENDATION:

- ◎ The GEO working group recommends that the Geographic sample acquisition location / GEO be adopted into the ANSI/NIST ITL standard, as defined in section 7.7